culated for a one year follow-up. Adherence was measured using proportion of days covered (PDC), where a PDC≥80 was considered adherent. Multi-variable linear regression was used to examine the relationships between cost and adherence, controlling for patient demographics (age, gender, and job type) and Charlson comorbidity score. **RESULTS:** Among the 4978 individuals included in the study, the average adherence to oral hypoglycemic agents was 72.7%, and 56.6% (N=2820) of the study population had a PDC≥80. The mean total medical/pharmacy costs were similar for both the adherent and the non-adherent. Individuals who were adherent to their diabetes medications, however, had significantly lower short-term disability costs ($1161/year) than did the non-adherent ($1840/year). **CONCLUSIONS:** In general, diabetes patients who adhered to their treatment regimen had much lower short-term disability costs when compared to the non-adherent. This result carries special implications for employers concerned with the total costs associated with diabetes in their employee populations.

PDB68

ADHERENCE TO ORAL ANTIDIABETIC MEDICATIONS IN THE PEDIATRIC POPULATION WITH TYPE 2 DIABETES

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OBJECTIVES: To assess adherence and persistence to OAD medications in the pediatric population and to determine how adherence and persistence differ by age, gender and race in the study population. **METHODS:** A retrospective cohort analysis of the Texas Medicaid prescription claims database. The study included pediatric subjects (10-18 years) with type 2 diabetes who had OAD medications between January 2006 and December 2009. Index date was defined as the date subjects had their first OAD medication between January 1, 2006 and December 31, 2009. Prescription claims were analyzed over a 6 month pre-index period through a 12-month post-index period. Adherence was measured using the medication possession ratio (MPR). **RESULTS:** A total of 3,109 subjects met inclusion criteria. The overall mean MPR± SD was 44.69% ± 27.06. Adherence differed by gender ($p<0.0001$); race ($p<0.0001$); and age category ($p<0.0001$). Males had higher mean MPR± SD (47.47 ± 27.42) compared to females (43.29 ± 26.78). In addition, mean MPR for whites (50.04 ± 29.65) was significantly higher compared to blacks (44.24 ± 26.16) and Hispanics (42.50 ± 26.10). Subjects ≤ 12 years of age had significantly higher mean MPR (48.82 ± 27.27) compared to those in older age categories. Logistic regression analysis revealed that age (continuous) was significantly related (OR=0.91; 95% CI=0.87-0.95) to being adherent (MPR≥80%). Males were 25% (OR=1.25; 95%CI=1.02-1.53; p=0.034) more likely to be adherent (MPR≥80%) compared to females and whites were twice more likely to be adherent (MPR≥80%) compared to Hispanics (OR=2.02; 95%CI=1.54-2.66; p=0.0012). The overall mean days to non-persistence (± SD) was 108 days (± 86). Persistence was significantly and negatively associated with age ($p < 0.0001$). Among the covariates, white race was significantly related to longer persistence. **CONCLUSIONS:** Adherence and persistence to OAD medications in the study population is generally suboptimal.

PDB69

THE IMPACT OF NOCTURNAL HYPOGLYCEMIC EVENTS ON FUNCTIONING, WELL-BEING AND DIABETES MANAGEMENT

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OBJECTIVES: Non-severe Nocturnal Hypoglycemic Events (NSNHEs) are hypoglycemic events that occur during sleep but don't require medical assistance from another individual. Impacts NSNHEs may have on are rarely studied and little is known about how NSNHEs may affect patient functioning, well-being, and diabetes management. **METHODS:** Nine focus groups were held in four countries (France, Germany, United Kingdom, US) with diabetics who had experienced a NSNHE within the previous month. Groups were audio-taped and analyzed thematically according to grounded theory principles of concept elicitation. **RESULTS:** 78 people with diabetes participated in the focus groups (53% female, 69% Type 2 diabetes, 65% insulin dependent). The average incident rate of NSNHEs was 4.0 per month (range: 1-22.5). NSNHEs were thought to be more difficult to predict, understand, or manage and created more worry than day time events. Thematic saturation was reached after the 7th focus group. Major themes for both diabetes types, defined as those that occurred in more than 5% of statements, were Next Day Effects(17.3%), Symptoms (14.3%), Sleep Impacts (11.3%), Social Impacts (8.5%), Corrective Action (8.5%), Practical Management (8.5%), Feelings about NSNHEs (5.5%)and Work Impacts (5.5%). The negative effects of these areas of impacts appear to be caused by the unique confluence of sleep disruption with the physiologic effects of fluctuating blood sugars in the night and throughout the next day. The following day 11% of respondents reported adjusting their insulin dose, 6% monitored their blood sugars more frequently and 6% stated that they run their sugars high before bedtime as a strategy for avoiding NSNHEs. **CONCLUSIONS:** Both Type 1 and Type 2, insulin dependent and not, patients, experience NSNHEs and the range of impact on these patients is wide with a majority of participants experiencing strong impacts which limit their daily functioning and well-being and affect their diabetes management strategies.

PDB70

HEALTH UTILITY FOR PATIENTS WITH TPYE 2 DIABETES MELLITUS IN CHINA

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OBJECTIVES: To assess health utilities and examine factors affecting health utilities among patients with type 2 diabetes mellitus (T2DM) in China. **METHODS:** Data were obtained from a cross-sectional survey of T2DM patients in outpatient settings from October to December, 2011 in Beijing and Tianjin. Eligible patients were ≥18 years, had a diagnosis of T2DM ≥1 year and received ≥1 year anti-diabetic treatment. Health utility was measured using The Chinese version of EQ-5D. The EQ-5D index score and visual analog scale (VAS) score were calculated for all T2DM patients and subgroups defined by fasting blood glucose control (FBG<8 mmol/L) and complications. Multivariate linear regressions were conducted to assess factors associated with health utilities such as patient demographics, glucose control, complications, and lifestyle variables. **RESULTS:** A total of 588 patients were included with 54.9% female, mean age of 63.3 years and mean disease duration of 11.3 years. About 64.5% patients had FBG control. Most patients (94.9%) had ≥1 complication: macrovascular complications (50.9%), retinopathy (59.1%), nephropathy (28.6%), neuropathy (52.3%). Mean EQ-5D and VAS scores for all patients were 0.78 and 64, respectively. Mean EQ-5D score was higher among patients with FBG control versus those without (0.80 vs. 0.75, p=0.003). Patients with macrovascular complications, retinopathy, nephropathy and neuropathy had significantly lower EQ-5D score compared to those without the corresponding complications (0.73 vs. 0.82, 0.75 vs. 0.83, 0.74 vs. 0.80, and 0.73 vs. 0.84, respectively; all P<0.001). Similar results were observed for EQ-VAS in these comparisons. Macrovascular complications and some microvascular complications (e.g., nephropathy and neuropathy) were negatively associated with health utilities while education and exercise were positively associated with health utilities. **CONCLUSIONS:** Compared to the general Chinese population (EQ-VAS of 80), patients with T2DM have impaired quality of life. Factors affecting health utilities may include complications, education and exercise.

PDB71

HEALTH RELATED QUALITY OF LIFE IN KIDNEY TRANSPLANT PATIENTS WITH DIABETES

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OBJECTIVES: We sought to assess the disutility associated with diabetes after kidney transplant. **METHODS:** We enrolled 233 kidney transplant recipients aged 18-74 years (response rate 79%) from a Midwestern hospital outpatient department. Recipients with multiple or multi-organ transplants, those with laboratory evidence that suggests acute cellular damage (Creatinine-Kinase >200 U/L), or a diagnosis of acute renal failure or acute rejection were excluded from the analysis (n=33). Participants HRQOL were evaluated using the Euro-QoL-5 Dimension (EQ-5D), Health Utility Index Mark III (HUI-III), and the Short Form-6D (SF-6D) which was calculated from the generic section (SF-12) of the Kidney Disease Quality of Life 36 (KDQOL-36). We estimated health utilities associated with diabetes using General Linear Modeling after adjusting for demographic, socio-economic, and clinical characteristics. **RESULTS:** The adjusted Health disutilities associated to diabetes were clinically and statistically significant: EQ-5D (Δ=0.05; $p<0.01$), HUI-III (Δ=0.09; $p<0.01$), and SF-6D (Δ=0.04, $p<0.01$). There was no difference between diabetic patients with good glycemic control (mean serum glucose <126mg/dL in the 3 months prior to enrollment) and patients with poor glycemic control. **CONCLUSIONS:** Among kidney transplant patients between the ages of 18 to 74, non-diabetics have significantly higher HRQOL scores on the EQ-5D, HUI-III, and SF-6D compared to diabetic patients.

PDB72

THE IMPACT ON UTILITIES OF WEIGHT LOSS AND WEIGHT GAIN AMONG CANADIAN PATIENTS WITH TYPE 2 DIABETES

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OBJECTIVES: There is evidence in the literature linking weight gain on anti-diabetic medication to impact on psychosocial well-being and non-compliance in type 2 diabetes (T2D). Due to the lack of data on the impact of weight loss and the imminent introduction of a new class of oral agents (SGLT2 inhibitors) with demonstrated weight-loss properties, this study was designed to compare the impact of weight gain and weight loss on utilities among Canadian T2D patients. **METHODS:** Health states included a T2D base-case health state and six additional weight change health states (base-case ±3%, ±5%, and ±7% weight change relative to current weight). Utilities were elicited using time trade-off techniques. Enrollment requirements included: having T2D for at least two years, adequate control on antidiabetic medication, not receiving insulin, and not enrolled in a T2D clinical trial. **RESULTS:** Among 96 respondents (mean age 55 years; 51% male; mean body mass index (BMI) 32 kg/m^2) 84% expressed a desire to lose weight. The mean utility (standard error (SE)) for the base-case T2D health state was 0.911 (0.013). The utility decreased to 0.907 (0.013), 0.865 (0.014) and 0.806 (0.017) for the 3%, 5% and 7% weight gain health states, respectively, and increased to 0.923 (0.012), 0.940 (0.011) and 0.949 (0.010) for the 3%, 5% and 7% weight loss health states, respectively. Linear mixed models indicated that a change in weight leading to a one unit increase and decrease in BMI had significant effects (SE) on utilities of -0.0472 (0.005) and 0.0171 (0.003), respectively. **CONCLUSIONS:** We observed a dose-response relationship between weight change and patient-elicited utilities in T2D health states with weight gain having a stronger effect than weight loss. The weight-loss properties of SGLT2 inhibitors may improve utilities while preventing the disutility associated with weight gain, which may positively impact treatment compliance and health outcomes.